Stanford

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Ph.D. Student in Chemistry, admitted Autumn 2020

## Publications

### PUBLICATIONS

- **Photonic Engineering Enables All-Passive Upconversion Imaging with Low-Intensity Near-Infrared Light** *ADVANCED FUNCTIONAL MATERIALS*
  Hamid, R., Feng, D., Narayanan, P., Edwards, J. S., Hu, M., Belliveau, E., Kim, M., Yin, S., Deshpande, S., Wan, C., Pucurimay, L., Czaplewski, D. A., Congreve, et al
  2025

- **Alleviating Parasitic Back Energy Transfer Enhances Thin Film Upconversion** *ADVANCED OPTICAL MATERIALS*
  Narayanan, P., Hu, M., Pucurimay, L., Gallegos, A. O., Zhou, Q., Belliveau, E., Ahmed, G. H., Fernandez, S., Michaels, W., Murrietta, N., Mutatu, V. E., Feng, D., Hamid, et al
  2025

- **Understanding the Formation Dynamics and Physical Properties of Nanocapsules Using Charge Detection Mass Spectrometry.** *ACS nano*
  Harper, C. C., Schloemer, T. H., Jordan, J. S., Heflin, N., Narayanan, P., Zhou, Q., Congreve, D. N., Williams, E. R.
  2024

- **2D mixed halide perovskites for ultraviolet light-emitting diodes** *DEVICE*
  Hu, M., Lyu, J., Murrietta, N., Fernandez, S., Michaels, W., Zhou, Q., Narayanan, P., Congreve, D. N.
  2024; 2 (11)

- **Bulk Heterojunction Upconversion Thin Films Fabricated via One-Step Solution Deposition.** *ACS nano*
  Hu, M., Belliveau, E., Wu, Y., Narayanan, P., Feng, D., Hamid, R., Murrietta, N., Ahmed, G. H., Kats, M. A., Congreve, D. N.
  2023

- **Promoting multiexciton interactions in singlet fission and triplet fusion upconversion dendrimers.** *Nature communications*
  He, G., Churchill, E. M., Parenti, K. R., Zhang, J., Narayanan, P., Namata, F., Malkoch, M., Congreve, D. N., Cacciuto, A., Sfeir, M. Y., Campos, L. M.
  2023; 14 (1): 6080

- **Spatially Controlled Uv Light Generation at Depth Using Upconversion Micelles.** *Advanced materials (Deerfield Beach, Fla.)*
  Zhou, Q., Wirtz, B. M., Schloemer, T. H., Burroughs, M. C., Hu, M., Narayanan, P., Lyu, J., Gallegos, A. O., Layton, C., Mai, D. J., Congreve, D. N.
  2023: e2301563

- **Water additives improve the efficiency of violet perovskite light-emitting diodes** *MATTER*
  Hu, M., Fernandez, S., Zhou, Q., Narayanan, P., Saini, B., Schloemer, T. H., Lyu, J., Gallegos, A. O., Ahmed, G. H., Congreve, D. N.
  2023; 6 (7): 2356-2367

- **Controlling the durability and optical properties of triplet-triplet annihilation upconversion nanocapsules.** *Nanoscale*
  Schloemer, T. H., Sanders, S. N., Narayanan, P., Zhou, Q., Hu, M., Congreve, D. N.
  2023

- **Nanoengineering Triplet-Triplet Annihilation Upconversion: From Materials to Real-World Applications.** *ACS nano*
  Schloemer, T., Narayanan, P., Zhou, Q., Belliveau, E., Seitz, M., Congreve, D. N.
  2023

- **Sequential Carrier Transfer Can Accelerate Triplet Energy Transfer from Functionalized CdSe Nanocrystals** *JOURNAL OF PHYSICAL CHEMISTRY LETTERS*
  Wilson, M. W. B., Hasham, M., Narayanan, P., Villanueva, F., Green, P. B., Imperiale, C. J.

2023: 1899-1909

- **Triplet Fusion Upconversion Nanocapsule Synthesis.** *Journal of visualized experiments : JoVE*
  Schloemer, T. H., Sanders, S. N., Zhou, Q., Narayanan, P., Hu, M., Gangishetty, M. K., Anderson, D., Seitz, M., Gallegos, A. O., Stokes, R. C., Congreve, D. N.
  2022

- **Luminescence Enhancement Due to Symmetry Breaking in Doped Halide Perovskite Nanocrystals.** *Journal of the American Chemical Society*
  Ahmed, G. H., Liu, Y., Bravic, I., Ng, X., Heckelmann, I., Narayanan, P., Fernandez, M. S., Monserrat, B., Congreve, D. N., Feldmann, S.
  2022